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Thesis Title : A Comparative Study of Learning Achievement, Retention, and Preference in which Positive and Negative Polarmotional Transparencies were Used for Teaching "Digital Circuit I".

Concentration : Technical Education Technology

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Abstract

The purpose of this experimental research was to compare the learning achievement, retention, and preference in which positive and negative polarmotional transparencies were used for teaching "Digital Circuit I". Sixty samples were collected from sophomore students in the Department of Electronics, Lopburi Technical College. They were assigned into two experimental groups. Each group was equally comprised of thirty students. The first experimental group studied with positive polarmotional transparencies. The second experimental group studied with negative polarmotional transparencies. The research instruments were positive and negative polarmotional transparencies, achievement test, retention test, and preference response forms developed by the researcher. The data were analyzed by percentage, arithmetic mean, and standard deviation. A t-test and chi-square test statistics were used for testing the significant difference.

The results of the research revealed that there were significant differences between the two groups at the level of .01. The average scores of the group studied with positive polarmotional transparencies was higher than the average scores of the group studied with negative polarmotional transparencies on learning achievement and retention. There was no significant difference on preference of learning from positive and negative polarmotional transparencies at the level of .01.